



1

SEQUENCE LISTING

<110> ZIMMET, PAUL ZEV  
COLLIER, GREGORY

<120> A NOVEL GENE AND USES THEREFOR

<130> 229752000701

<140> 10/067,832

<141> 2002-06-03

<150> 09/331,930

<151> 1999-06-30

<150> PCT/AU98/00902

<151> 1998-10-30

<150> AU PP 0117

<151> 1997-10-31

<150> AU PP 0323

<151> 1997-11-11

<160> 22

<170> PatentIn Ver. 3.2

<210> 1

<211> 370

<212> DNA

<213> Psammomys obesus

<220>

<221> CDS

<222> (29)..(247)

<400> 1

gttccaggag attacagctc cagccaca atg att gag gtg gtt tgc aac gac 52  
Met Ile Glu Val Val Cys Asn Asp  
1 5

cgt cta gga aag aaa gtc cgc gtt aag tgc aac acc gat gac acc atc 100  
Arg Leu Gly Lys Lys Val Arg Val Lys Cys Asn Thr Asp Asp Thr Ile  
10 15 20

ggg gac ttg aag aaa ctg ata gcg gcc caa act ggc act cgt tgg aat 148  
Gly Asp Leu Lys Lys Leu Ile Ala Ala Gln Thr Gly Thr Arg Trp Asn  
25 30 35 40

aag atc gtt ctt aaa aag tgg tac acg att ttt aag gac cat gta tct 196  
Lys Ile Val Leu Lys Lys Trp Tyr Thr Ile Phe Lys Asp His Val Ser  
45 50 55

ctg gga gat tat gaa atc cac gat ggg atg aac ctg gag ctt tat tac 244  
Leu Gly Asp Tyr Glu Ile His Asp Gly Met Asn Leu Glu Leu Tyr Tyr  
60 65 70

cag tagaggggaa ttctccacc ttgcccaacc ttgctttcct ctcccatggc 297  
Gln

tcatttaaca ctgtttaga tgctcatttt taacaattca catgaataaa aactttgatg 357

ctgcaaaaaa aaa 370

<210> 2

<211> 73

<212> PRT

<213> Psammomys obesus

<400> 2

Met Ile Glu Val Val Cys Asn Asp Arg Leu Gly Lys Lys Val Arg Val  
1 5 10 15

Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala  
20 25 30

Ala Gln Thr Gly Thr Arg Trp Asn Lys Ile Val Leu Lys Lys Trp Tyr  
35 40 45

Thr Ile Phe Lys Asp His Val Ser Leu Gly Asp Tyr Glu Ile His Asp  
50 55 60

Gly Met Asn Leu Glu Leu Tyr Tyr Gln  
65 70

<210> 3

<211> 342

<212> DNA

<213> Psammomys obesus

<400> 3

tcatgtgaat tggtaaaaat gagcatctac aacagtgtta aatgagccat gggagaggaa 60  
agcaagggtg ggcaagggtg aggaattccc ctctactggt aataaagctc caggttcatc 120  
ccatcgtgga ttccataatc tcccagagat acatgggcct taaaaatcgt gtaccacttt 180  
ttaagaacga tcttattcca acgagtgccg gtttgggccc ctatcagttt cttcaagtcc 240  
ccgatggtgt catcggtgtt gcacttaacg cggactttct ttccatagacg gtcgttgcaa 300  
accacctcaa tcattgtggc tggagctgta atctcctgga ac 342

<210> 4

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 4

aagctttttt tttttg

16

<210> 5  
<211> 13  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 5  
aagcttcggg taa

13

<210> 6  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 6  
agtccgcgtt aagtgaaca

20

<210> 7  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
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primer

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ctccagggtc atcccatcgt

20

<210> 8  
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primer

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ggctacagct tcaccaccac

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<223> Description of Artificial Sequence: Synthetic primer

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gcttgctgat ccacatctgc

20

<210> 10

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic primer

<400> 10

tggtataaaa gctccaggtt catcccatcg

30

<210> 11

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 11

caaactggca ctcgttgga

20

<210> 12

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 12

gttgggcaag gtggaggaa

19

<210> 13

<211> 102

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(99)

<220>  
 <221> modified\_base  
 <222> (44)  
 <223> a, c, g, or t

<400> 13  
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 aaa tgc aac acg gat gat acc atc ggg gac ctt aag aag ctg att gca 96  
 Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala  
                     20                    25                    30  
  
 gcc taa 102  
 Ala

<210> 14  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> MOD\_RES  
 <222> (15)  
 <223> Leu, Pro, His, or Arg

<400> 14  
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                     20                    25                    30  
  
 Ala

<210> 15  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

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 Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala  
                     20                    25                    30  
  
 Ala Gln Thr Gly Thr Arg Trp Asn Lys Ile Val Leu Lys Lys Trp Tyr  
             35                    40                    45  
  
 Thr Ile Phe Lys Asp His Val Ser Leu Gly Asp Tyr Glu Ile His Asp  
     50                    55                    60

Gly Met Asn Leu Glu Leu Tyr Tyr Gln  
 65 70

<210> 16  
 <211> 73  
 <212> PRT  
 <213> Mus musculus

<400> 16  
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 Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala  
 20 25 30  
 Ala Gln Thr Gly Thr Arg Trp Asn Lys Ile Val Leu Lys Lys Trp Tyr  
 35 40 45  
 Thr Ile Phe Lys Asp His Val Ser Leu Gly Asp Tyr Glu Ile His Asp  
 50 55 60  
 Gly Met Asn Leu Glu Leu Tyr Tyr Gln  
 65 70

<210> 17  
 <211> 73  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 17  
 Met Ile Glu Ile Thr Val Asn Asp Arg Leu Gly Lys Lys Val Arg Ile  
 1 5 10 15  
 Lys Cys Asn Pro Ser Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala  
 20 25 30  
 Ala Gln Thr Gly Thr Arg Trp Glu Lys Ile Val Leu Lys Lys Trp Tyr  
 35 40 45  
 Thr Ile Tyr Lys Asp His Ile Thr Leu Met Asp Tyr Glu Ile His Glu  
 50 55 60  
 Gly Phe Asn Phe Glu Leu Tyr Tyr Gln  
 65 70

<210> 18  
 <211> 66  
 <212> PRT  
 <213> Fasciola hepatica

<400> 18  
 Asp Arg Leu Gly Lys Lys Val Arg Val Lys Cys Asn Pro Thr Asp Lys  
 1 5 10 15

Val Gly Asp Leu Lys Lys Leu Ile Ala Ala Gln Thr Gly Thr Ala Pro  
                   20                  25                  30

Glu Arg Ile Val Leu Lys Lys Trp Tyr Thr Ile Tyr Lys Asp His Val  
                   35                  40                  45

Thr Leu Arg Asp Tyr Glu Ile Asn Asp Gly Met Asn Leu Glu Leu Tyr  
                   50                  55                  60

Tyr Gln  
       65

<210> 19

<211> 73

<212> PRT

<213> *Oryza sativa*

<400> 19

Met Ile Glu Val Val Cys Asn Asp Arg Leu Gly Lys Lys Val Arg Val  
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Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala  
                   20                  25                  30

Ala Gln Thr Gly Thr Arg Trp Asn Lys Ile Val Leu Lys Lys Trp Tyr  
                   35                  40                  45

Thr Ile Tyr Lys Asp His Ile Thr Leu Ala Asp Tyr Glu Ile His Asp  
                   50                  55                  60

Gly Met Gly Leu Glu Leu Tyr Tyr Asn  
       65                  70

<210> 20

<211> 73

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 20

Met Ile Glu Val Val Cys Asn Asp Arg Leu Gly Lys Lys Val Arg Val  
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Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala  
                   20                  25                  30

Ala Gln Thr Gly Thr Arg Trp Asn Lys Ile Val Leu Lys Lys Trp Tyr  
                   35                  40                  45

Thr Ile Leu Lys Asp His Ile Cys Leu Glu Asp Tyr Glu Val His Asp  
                   50                  55                  60

Gln Thr Asn Leu Glu Leu Tyr Tyr Leu  
       65                  70

<210> 21  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 21  
 Met Gln Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu  
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 Val Glu Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile Gln Asp  
                   20                  25                  30  
 Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys  
                   35                  40                  45  
 Gln Leu Glu Asp Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu  
           50                  55                  60  
 Ser Thr Leu His Leu Val Leu Arg Leu Arg Gly Gly  
           65                  70                  75

<210> 22  
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 <212> PRT  
 <213> Arabidopsis thaliana

<400> 22  
 Gly Lys Thr Ile Ile Leu Glu Val Glu Ser Ser Asp Thr Ile Ala Asn  
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 Val Lys Glu Lys Ile Gln Val Lys Glu Gly Ile Lys Pro Asp Gln Gln  
                   20                  25                  30  
 Met Leu Ile Phe Phe Gly Gln Gln Leu Glu Asp Gly Val Thr Leu Gly  
           35                  40                  45  
 Asp Tyr Asp Ile His Lys Lys Ser Thr Leu Tyr Leu  
           50                  55                  60